

PREFACE

During the last few decades there has been an increasing interest in the study of medicinal plants and their traditional use in different parts of the world. Documenting the indigenous knowledge through ethnobotanical studies is important for the conservation and utilization of biological resources. Today according to the World Health Organization (WHO), as many as 80% of the world's people depend on traditional medicine for their primary healthcare needs.

Plants have been used in traditional medicine for several thousand years. The knowledge of medicinal plants has been accumulated in the course of many centuries based on different medicinal systems such as Ayurveda, Unani and Siddha etc. Sikkim Himalayan region is characterized by a rich diversity of ethno medicinal plants as well as a rich heritage of traditional medicine practices. Earlier studies on traditional medicinal plants also revealed that the economically backward local and tribal people of Sikkim prefer folk medicine due to low cost and sometimes it is a part of their social life and culture. Now, the time has come to compile and document available knowledge on our valuable plant resources and to prove their utility scientifically through detailed phytochemical, biological and pharmacological investigations.

The work embodied in this thesis is a humble and sincere effort to explore and screen two ethnomedicine *Kaempferia rotunda* Linn. and *Eupatorium cannabinum* Linn. used by traditional healer of Sikkim in their health care since time immemorial. In this research work the constituents of these plants were isolated, purified and analyzed the chemical structures of the pure compounds as well as their activities were evaluated. The thesis has been segregated into 10 well-defined chapters and finally a summary and the conclusion has been drawn along with the summary of the whole work. At the end of each chapter the necessary references have listed which are superscripted in the text. Thus the investigated works deals with a scientific approach to explore the pharmacological activities of the extracts and some activities from isolated compound from *K. rotunda* and *E. cannabinum* two popular ethnomedicine from Himalayan Sikkim region, for the benefit of the entire human beings.